

FISHERIES RESOURCES RESEARCH INSTITUTE
NATIONAL AGRICULTURAL RESEARCH ORGANISATION

WORKSHOP REPORT
ON
THE FISHERIES RESEARCH ON LAKE
NABISOJJO – LUWERO DISTRICT

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A3.5 OPTIONS FOR FISHERIES MANAGEMENT ON LAKE NABISOJJO

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Introduction

Lake Nabisojjo is located in Wakyato sub-county. It is categorised as a minor Lake with an area of 5-6km². The Lake has both indigenous and stocked fish species from Lake Kyoga. The stocking exercise took place two years ago. The stocking exercise of the Lake with fish was however done before any scientific research had been done to appreciate the fishery potential of the Lake and the viability of the commercial fisheries project. The are reasons why research was not carried; bureaucracy in attracting researchers, the enthusiasm the stakeholders had after losing Lake Kyoga which was a major source of fish and revenue to the District and lack of funds for the district to contract its own researchers.

Management options

Management options of the Lake will depend on the following.

- a) Recommendations of the researchers.
- b) The nature and location of the Lake.
- c) The attitude of the people of Luwero District.
- d) The innovation of the stakeholders.

Recommendations of the researchers

The researchers have recommended as follows:-

- i) To allow at least 4 canoes with nets (3mesh size) to tentatively operate on the Lake for at least six months.
- ii) Increase the volume of the Lake to reduce on over crowding of some of small types of fish (*O. Eseculentusus*)
- iii) Consider possible exploitation of *protepterosus aethopicus* (mamba) and *clarias gariepinus* (Maale) using hooks.

The Luwero District Council in its last meeting resolved that the Lake should be tendered. The District production manager has already written to the district tender board to implement the resolution. The Exploitation of the Lake would be based on recommendations and guidance of the researchers.

Another option would be to licence local fishermen to operate on the Lake during the stipulated time and using the recommended gears by the researchers

Nature and location of the lake

The Lake is located in a swampy area (i.e a wet land). There fore options to put more emphasis on those fish species that are more adopted to wet lands should be encouraged.

These species include:

Protopterosus sp(Lung fish or maamba) and *clarias sp.* (Cat fish or maale). It has also been found that those wetlands near Lake (Lacustrine wet lands) are very important homes of Lung fish and cat fish as the table shows.

Table 8: Swamp fish catches in 1998 (metric tonnes)

	Kyoga	Victoria	Edward-George	Albert	Wamala	Others
LUNG FISH	3815 (59.3%)	315 (49%)	1504 (5.7%)	364 (5.7%)	83 (1.3%)	335 (5.5%)
CAT FISH	2142 (61.9%)	429 (12.4%)	386 (11.2%)	313 (9.0%)	39 (1.1%)	150 (4.3%)

More research should be carried out as recommendations by researchers on the development of the fishery of the two fish which are adopted to wetlands near Lakes (Lacustrine wet lands).

The attitude

Attitude of two groups of people must be surveyed before any options can be taken.

The political attitude:

This is very important if the Nabisojjo fishery is developed. One has to ask a question such as: are the political leaders prepared to tolerate and found along term project that may produce any results for a period of more than 2 to 5 years.

A fishery project like Nabisojjo fish project should be regarded as a long term project which must be managed with respect to the normal processes that the projects pass through including research, monitoring, evaluations e.t.c. All these stages require funds, time and patience. And each step concluded is an achievement its self. For example what has been done in Lake Nabisojjo so far in a period of only two years is a very big achievement towards the future full-scale development of the fishery.

Firstly the lake project was identified, some vegetation was removed from the Lake to expand it, some stocking took place and so far two groups of researchers from Kajiado research station and the fisheries research institute (FIRRI) have made studies on the Lake and their recommendations are being analysed. Whatever options we take we should targeted political attitude and attract it towards the technical one which puts more emphasis on research and continues monitoring before the conclusion can be made.

The market attitude

This is the attitude possessed by the consumers and traders.

It is common knowledge that people from Luwero need big sized tilapia. If it is found later that regardless of any technical recommendation, tilapia fish species fail to research a particular size desired by the consumers of Luwero district due to some other biological factors, which will then be the option?

Attract fish mongers from districts which produce small sized tilapia

Districts like Mubende, which consume small sized Nabisojjo fish. The traders and consumers are already used to this small size of fish. The only problem however would be the transport costs incurred in transporting fish to such districts.

Change the attitude

The attitude, which despises small fish, can be changed among people of Luwero through sensitisation. Where there is scarcity, attitude can easily change. At the moment tilapia fish from lake Kyoga are very expensive. The only way out is for people either to eat the small but cheap tilapia from the Nabisojjo lake fishery that is being developed or to continue eating the skeletal Nile perch remains from factorise.

(a) Develop the fishery of big sized fish as suggested before (i.e Lung fish and cat fish)

(b) Develop fishery of small sized fish which people are used to:

Research should be carried out on the possible development of the fishery of common small sized fish that consumers are used to e.g Nkejje and Nsonzi.

Innovations of the stakeholders

The stakeholders especially the political leadership can decide to attract other capable investors who have enough capital to develop the Lakes fishery and its environmental potential. In such a case the lake can be tendered to be managed by component firms that can develop it and use it for a particular period and there after hand it over to the district. Investors attracted can develop the Lake considering these other options.

Research centre

The lake can be developed into a research centre that can be used by several kinds of researchers e.g. biologists, limnologists, water ecologists etc

Change fish farming

By use of nets, several compartments can be contracted with in water. Here fish can easily be farmed with close monitoring (see attached pages)

Tourist resort

The District chairperson has suggested that Nabisojjo lake area can be developed into a tourist resort. Tourists can be attracted due to the following:-

- i) Water sporting e.g swimming, boat cruising, and fish sports e.t.c
- ii) Unlike big Lakes Nabisojjo is in a pollution free area with no chemicals disposed in it. The water is still natural.
- iii) The Wakyato area where Nabisojjo is located has many wild animals including elephants.

Conclusion

Lake Nabisojjo project has a lot of potential in fisheries, tourism research and conservation purposes. It is the option taken and the commitments shown, and the development plan followed that will determine its success.

A3.6 AGRICULTURAL PRODUCTION WITH EMPHASIS ON INCOME GENERATION AMONG LAKE NABISOJJO COMMUNITIES

Sebale Edirisa - DAO Luvero

Agricultural production is a product of an area under a crop or animal and yield per unit area of that particular crop or animal. This simple concept is subject to complex modification when such factors as plant or animal density, crop damaged, partial harvest etc, are taken into account.

Agricultural production is important to the above communities in the following ways:

- a) Food and nutrition security
- b) Income generation.
- c) Natural resources consolidation.
- d) Cultural fulfilment.

Agricultural production is affected by a number of factories which can lead to no, low or high productivity depending on their availability and mode of utilisation, these factors include;-

- a) Farmers attitude towards agriculture/farming activities. Many do agriculture just at subsistence basis and do not consider commercialising agriculture.
- b) Lack of knowledge or technical know-how about the agricultural enterprises carried out.
- c) High cost of the necessary/improved agricultural farm inputs, e.g. improved crop seeds, animal breeds, fertilizers, acaricide, e.t.c., and also unavailability of the necessary inputs.
- d) Incidences of various crop and animal diseases and pests.
- e) Lack of streamlined marketing opportunities for the products so produced.
- f) Inadequate operational capital.
- g) Adverse weather/Climatic changes.

CONSTRAINTS AMONG LAKE NABISOJJO COMMUNITIES

From the situation analysis, an overview has emerged of interrelated problems at human and environmental level.

At the level of people:

- a) There is poor food and nutrition security and health of people, inadequate income and hence poverty.
- b) Hunger of poor nutrition and health people.

These are brought about by a set of factors, namely:

- a) Low yields, low income, little food preservation and storage, unhealthy food habits and unsafe drinking water, and dependence on women's labour.

- b) Inadequate income and poverty can be explained by a set of factors:
- c) Low yields, low prices at certain periods when forced to sell yield, little other employment opportunities and unequal gender relations which exert high pressure on unpaid labour of women.

At the level of environment:

- a) Resource degradation through wood cutting, overgrazing, overcropping and low investments in soil fertility.
- b) Resource degradation can be explained to a large degree by:-
- c) Soil fertility and biodiversity decrease because of little investment in soil fertility (fertilizer prices are high).
- d) Bush burning deforestation, overgrazing, overcropping and lack of environmental awareness.

There is also a low degree of organisation of farmers. This is usually as a result of poor communication systems, unfavourable social relations for marginal groups and also by seasonal migration especially pastoralists.

THE WAY FORWARD FOR IMPROVED AGRICULTURAL PRODUCTION

In order to alleviate problems among Lake Nabisojjo communities there is need for sustainable agriculture development which can lead to improved agricultural production.

Sustainable agriculture is about what can be achieved to make agriculture productive, environmentally sensitive and capable of preserving the social dynamics of rural communities.

An agricultural production system is considered to be near to sustainability if it simultaneously in respect to these three major aspects.

- a) Productivity for health and income
- b) Natural resources consolidation
- c) Cultural and institutional strengthening.

A3.7 CONTRIBUTION/INPUTS OF LUWEERO DISTRICT ADMINISTRATION INTO THE FISHERIES OF LAKE NABISOJJO

Sekajja Robert – ACA Luwero

BACK GROUND:

When Nakasongola was promoted to District status in 1997, the lake fishery of Lake Kioga was retained in the new District leaving Luweero entirely with no major Water Body apart from rivers and, Dams. There were even suggestion to close and transfer the entire Fisheries Staff to Nakasongola where major activities of fisheries were retained. But at realisation of another water body in the names of Nabisojjo - like, which could be developed, the District facilitated the Fisheries Department to explore the potential of the lake.

The District Fisheries Officer after the exercise assured the District Authorities that the waters were in fact a small lake not a river as many people had called it at first.

The District through it's Fisheries Department, drew a budget to develop, the lake by stocking it with good species of fish (Tilapia - *Oreochromis* from Lake Kioga as the one present at the time were stunted and were not growing to bigger size. The whole intention as to provide the people of Luweero especially after the loss of Lake Kioga to Nakasongola protein (fish), employment as well as to develop the whole area of Wakyato as the place is isolated and remote.

The budget which was approved was 4,893,000/=, These funds were used as follows:-

- i) Stocking the lake with 14,000 heads of fish.
- ii) Procurement of the boat for use on the lake, transport/fishing.
- iii) Procurement of a transportation unit, of fish from Lake Kioga to Lake Nabisojjo/in fish farming.
- iv) Procurement of life saving equipment (2 Life Jackets)
- v) Procurement of the motorcycle that was used to facilitate the stocking, exercise/fish farming activities in the District.
- vi) Strengthening the Fisheries Department on the side of manpower and extra Officer, Mr. Ekanya Geoffrey - AFO was recruited, with the sole objective of managing the lake after stocking it.
- vii) The District Administration with Wakyato sub-country Prisoners opened the only existing fish landing at the lake.

At the realisation of the slow progress/ growth of the stocked fish, after sampling, the District authorities instructed the District Fisheries Officer to contract relevant research institutions in fisheries sector to come and carry out an extensive research and give the district a way forward. So far Kajjansi Fisheries Research Institute, responded first, came and carried out a research on the lake, but they said they could not do much because they lacked many logistics, which the District could not provide. The preliminary result were not so alarming.

The District has an extensive programme of developing the lake, but its waiting for the results of the on going research programme on the lake at the present.